Gaines County Cotton/Peanut News

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General Situation

WOW, THE WEATHER, what can you say! Wet and cool is what we have had and that is what they are forecasting for this weekend and beyond. The past week has brought rain to the county and some areas in excess of 3 inches. This is not exactly the weather we would expect for this time of the year but we will remain optimistic. There is still time and we have a good looking crop where folks were able to keep up with the daily water need earlier in the season. Cotton in the area ranges from cutout to cracked bolls with the first bale being harvested a few weeks ago. Also, with cotton defoliation and harvest in mind, Dr. Randy Bowman's harvest aid guide for 2006 can be found at the below sites: http://lubbock.tamu.edu/focus/ , http://lubbock.tamu.edu > What's New.

No peanut fields have been reported to be dug as of yet however, I do anticipate that at least some Valencias will come off very soon. Whereas, the majority of the fields in Gaines County will be dug, depending on the weather, within the next month. Diseases are still being picked up in program fields but at this point Post Harvest Interval's (PHI) may limit the application of fungicides depending on what you're after. Be sure to read labels and follow all directions and harvest intervals.

What's Happening in the Cotton

Cotton Aphids:

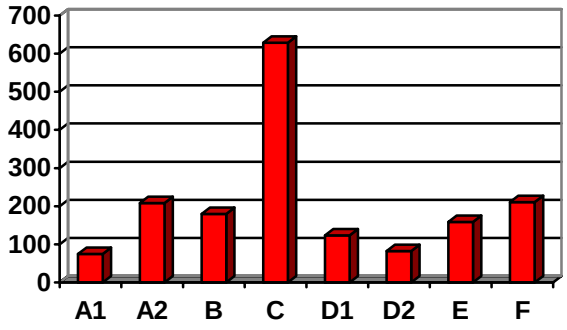
The recent rainfalls have done a great job of washing away what few aphids we had in most cotton fields. No program fields are at threshold at this time, and most fields are averaging less than 1 per leaf. However this does not mean we are completely out of the woods yet. Therefore, please remain vigilant and remember that **treatments should be initiated when 10-15 aphids are present on the 5th mainstem node down from the terminal.** Thresholds are lower after cotton begins to open because we are protecting cotton from becoming sticky.

Pink Bollworms (PBW):

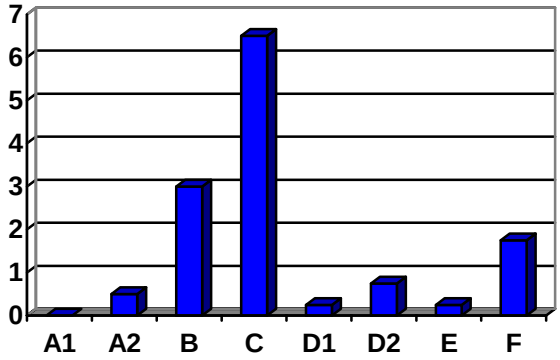
Numbers are from traps set on April 25 and have been run weekly since. Locations of the traps are as follows in each section of Gaines County.

A: NW	B: N	C: NE
D: SW	E: S	F: SE

The graph below depicts the total number of PBW moths caught in each trap to date in Gaines County since trapping began.



The graph below depicts the number of PBW moths caught per night in each trap for the week of September 1st .



Using a heat unit model we are able to predict when we should see initial emergence after overwintering, as well as when we will reach peak emergence and when we should see new generations. The heat unit model is based on temperature readings beginning on January 1st.

Pink Bollworm Development Based on Heat Unit Accumulation

PBW	Avg. HU Accumulation
Emergence	500
50% Emergence	1180
95% Emergence	1950
Complete Over Winter Emergence	2200
2nd Generation (1st infield)	1930
3rd Generation (2nd infield)	2680
4th Generation (3rd infield)	3430

Second (and subsequent) generations may be called "peak moth flights" referring to their captures in pheromone traps. Peak moth flights are usually seen over a 2-3 day period, with significantly higher numbers showing up in the traps at those times, they may even overwhelm the traps.

We reached 500 HU (emergence) in Gaines County on May 7th , 1180 (50% emergence) on June 15th, 1930 (2nd generation) on July 21st, 1950 (95% emergence) on July 22nd, and have currently accumulated 2909 HU as of September 3rd . ***(Please note that these HU figures are being gathered since the beginning of the year, whereas the total HU since May 1st is 2386).*** In cotton fields that are blooming you need to be checking for rosetted blooms. This will not tell you if a treatment is

necessary but will let you know you have activity and need to cut bolls as they mature. **The economic threshold for PBW is 10-15% infested bolls.** The only sure way to find out what level of infestation you have is by cutting bolls and looking for **PBW** entries and larvae. To sample for **PBW** you need to collect and examine 40 to 50 small bolls per field. Bolls about the size of a quarter should be pulled from the plant and carefully cut and examined for this pest. Newly infested bolls have a small clear bump or wart on the inside of the bur wall at the site where the larva entered the boll. The developing lint surrounding the wart is depressed or sunken in to accommodate the wart. The tiny, threadlike white worm can be found in the depressed area. The black head and movement of the larvae will make them easier to spot. Sampling bolls this size indicates the current status of the infestations. **DO NOT CONTINUE TO USE TRAP NUMBERS TO MAKE MANAGEMENT DECISIONS.**

More info and a heat unit calculator can be found at the Plains Cotton Growers website: http://www.plainscotton.org/

Cotton Bollworm:

Populations in all program fields remain below economic threshold. After a boll has gained 450 heat units it is relatively safe from worm damage. It is also very difficult for a worm population to become established in cotton that has only larger bolls present.

What We are Seeing in Peanut

Spider Mites are continuing to be found in Gaines County at low levels in a few fields. It appears that two separate, yet similar species are infesting these fields, the two-spotted mite and the carmine mite, both of which are essentially the same biology.

Often a good irrigation or heavy rain can reduce mite populations however, eggs usually go unaffected and at least some mites are sheltered by upper canopy leaves. Chemical control should be considered only when defoliation is taking place or appreciable populations are present. **Coverage when using chemicals for control of spider mites is essential. It has been my experience that Comite will do a good job by ground with high water gallonage, however by air, failures could be expected**. Now a relatively new product, Danitol was labeled for spider mite control on peanut in Texas several years ago, which also appeared to do a good job by ground when used at the higher rates.

Southern Corn Rootworms (SCR) are continuing to be found in a handful of peanut fields in the area. So far, this has occurred in a low percentage of fields and by no means have we found or have we had reports of widespread infestations, however area growers need to scout their fields carefully for **SCR** now. If you would like more information regarding **SCR** in peanuts, please contact my office.

Early Leafspot, **Web blotch** and **Pepper Spot** are continuing increasing steadily in numerous peanut fields locally. Area growers that have been on a regular fungicide schedule should not experience serious problems however, in lieu of a continuing rainy weather pattern and the combination of foliar and soil borne diseases such as *Rhizoctonia* or *Pythium*, ***I would strongly encourage all area peanut growers to stay on a fungicide schedule in accordance with the label regarding harvest restrictions until the crop is finished this year. Also, if your crop is thoroughly infected with these diseases, no amount of fungicides will help. So, please remember that fungicides are preventative and not curative in their mode of action.***

Sclerotinia Blight (SCB) is continuing be seen in peanut fields in Gaines County over the past several weeks. The fungus grows most rapidly at 26 degree C (79 degrees F). Sclerotia are produced most rapidly at 22 degrees C (72 degrees F) on all plant parts, in soil, and inside limb and pod tissue. ***Notably, the average temperature for the past 14 days has been 77 degrees F on average, therefore these cooler temperatures along with rainfall are almost perfect to incite disease progress.*** You need to be aware of its potential as a serious plant pathogen and the devastation it can cause. If you are aware of this problem in one of your fields, you need to hinder its ability to move into your other fields. This can be accomplished by good sanitation practices. If you enter or use a tool (shovel, your shoes, implements) in one of these fields, clean them

before moving on. This should be done by using a high pressure washer or other means that can remove all dirt particles from the possibly contaminated object. Research in the past year has shown that a **Bleach solution does not** do a satisfactory job of sanitizing equipment. So far, Omega 500F and Endura have held up well in keeping this disease in check when used at the proper labeled rates and application(s). Also, please remember the PHI's when using these products; Omega 500F has a 30 day PHI and Endura has a 14 day PHI.

Southern Blight (SB) has been found in a few fields within the region this past week. The infection loci has primarily been restricted to the underground plant parts, such as the roots and crown. Although, only a handful of fields are experiencing plant death, I think that in lieu of the pending cooler weather come September **SB** should not be a significant economic factor in the near future.

Irrigation Water Quality:

Recently, we have been receiving calls as well seeing what appears to be a water quality issue in peanut in the mostly northeastern portion of Gaines County. Specifically, the problem appears to be salinity. As water quality becomes marginal and cropping patterns change, some areas may experience injury and reduced yields. Each crop has its own susceptibility range to marginal quality water. Peanuts are not very tolerant, so it is imperative that water quality be assessed.

Salty irrigation water can cause two major problems in crop production: salinity hazard and sodium hazard. Salts compete with plants for water. Even if a saline soil is water saturated, the roots are unable to absorb the water and plants will show signs of stress. Foliar applications of salty water commonly cause marginal leaf burn and in severe cases can lead to premature defoliation and yield and quality loss.

Sodium hazard is caused by high levels of sodium that can be toxic to plants and can damage medium and fine-textured soils. When the sodium level in a soil becomes high, the soil will lose its structure, become dense and form hard crusts on the surface. To evaluate water quality, a water sample should be analyzed for total soluble salts, sodium hazard and toxic ions. **I would highly recommend that if you think you have a salinity problem, have your water tested *now* at your local water district or through a reputable lab for analysis.**

Upcoming Events & Announcements

>Peanut Pests: The Gaines and Terry-Yoakum IPM units will be looking for peanut fields that are experiencing pest problems (insect and disease) throughout the year. We are working on improving peanut pest database. It will be a great help if you could call one of our offices if you have a field that we could collect and observe some of these pests in.

>Gaines County Ag/Oil Day – **Sept 21st**

Other Area Field/Crops Tours

> Yoakum County Crop Tour- **Sept 12th**
> Floyd County Crop Tour-**Sept 19th**
> Mitchell County Ag Tour-**Sept 21st**
> Crosby County Crop Tour-**Sept 29th**

Industry Field Days

> Deltapine-**Sept 7th**
> FiberMax-**Sept 21st**
> Stoneville/Monsanto-**Sept 26th**
> Americot-**Sept 28th**

Acknowledgements

Funding for the IPM program is provided by donations from local agribusinesses. Money goes towards postage, travel, and wages for scouts. We are still in need of funding so if you know someone you think would be interested in donating please contact them or call our office. The IPM staff would like to thank these businesses that donated to the program and encourage producers to support their business as they have supported the producers.

AG Aero
Ag Texas Farm Credit Service
Birdsong Peanut
Bobby King Jr. Pump Service
Carter and Company Irrigation
First United Bank
Helena Chemical
McKinzie Insurance

Moore-Haralson Agency
Nolen Ag
Peters Irrigation
Pioneer Gin
Stateline Gin
Valley Irrigation and Pump Service
West Texas Center Pivots
West Texas National Bank
Western Peanut Growers Association
Whittenburg & Higginbottom Insurance

Special Thanks to our $1000 Contributors
Oasis Gin
Ocho Gin
Suncot Gin
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